



Preventing and Detecting Bovine Spongiform Encephalopathy (BSE)

Who Is Responsible?

Federal Responsibility

Four federal agencies are primarily responsible for overseeing the many imported and domestic products that could pose a risk of BSE (bovine spongiform encephalopathy). These agencies also are responsible for surveillance programs designed to detect and monitor animal and human diseases:

- The **U.S. Customs Service** screens all goods entering the country to enforce Customs laws and laws for 40 other agencies.
- **USDA's Animal and Plant Health Inspection Service (APHIS)** monitors the health of domestic animals and screens imported animals and other products to protect animal health.
- **USDA's Food Safety Inspection Service (FSIS)** monitors the safety of imported and domestically produced meat, poultry, and some egg products.
- The Department of Health and Human Services (HHS)'s **Food and Drug Administration (FDA)**, monitors the safety of all other foreign and domestic food products (including dietary supplements and animal feed), as well as vaccines for humans, drugs, cosmetics, medical devices, and the human blood supply.

In addition, two other HHS agencies -- the **Centers for Disease Control and Prevention** and the **National Institutes of Health** -- monitor human health to detect new-variant Cruetzfeldt Jacobs Disease (nvCJD).

Wisconsin's Responsibility

The **Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)** has responsibility for overseeing food safety, animal health and the safety of animal feed. Three DATCP divisions develop regulations and enforce both state and federal rules to protect the integrity and safety of imported and domestic products that could pose a risk of BSE and conduct surveillance programs designed to detect and monitor animal diseases. These divisions coordinate closely with federal agencies and other states.

- **Agricultural Resource Management** enforces federal and state laws regulating livestock feed and pet food, licenses and inspects commercial feed facilities, and investigates complaints to promote compliance with state and federal requirements for all feed regulations, including those to reduce the threat of BSE.
- **Animal Health** enforces rules to implement federal and state laws regulating animal health, conducts disease surveillance, facilitates diagnostic testing, monitors animal health certificates required for interstate shipment of animals, and provides education for producers, industry and private veterinarians.

- Food Safety enforces state laws and regulations pertaining to licensing and inspecting meat slaughter and processing plants that sell their products solely in Wisconsin. USDA monitors the state meat inspection system to ensure that state inspections are equal to the federal system.

In addition, the Wisconsin Department of Health and Family Services monitors human health to detect nvCJD.

Federal and State Actions Taken To Prevent and Detect BSE

Domestic Actions

According to a 2002 General Accounting Office (GAO) report, the United States acted as many as 5 years earlier than other countries to impose controls over imports of animals and animal feed ingredients from countries that had experienced BSE. Similarly, U.S. surveillance efforts to test cattle brains for BSE met internationally recommended testing targets earlier than other countries.

- In August 1997, FDA banned mammalian proteins in feed for cattle and other ruminants to prohibit potentially infectious agents from entering the feed supply. Renderers, feed manufacturers and blenders, feed distributors, and cattle producers are subject to the regulations. Proteins are added to feed to maintain the health and productivity of animals and can be derived from a number of sources, including animal meat and bone meal, fishmeal, and plant products. Animal protein products from pure sources of pork or equines and fish products are exempt from the ban. Additional exempted mammalian proteins are milk and milk by-products and blood meal. The feed ban prohibits the use of most mammalian proteins in cattle feed. Since animal feed and feed ingredients cannot be tested for BSE, it also requires that feed and feed ingredients containing prohibited animal proteins be labeled "Do not feed to cattle or other ruminants." Firms that handle both prohibited and non-prohibited feed and feed ingredients are now required to have effective procedures to ensure that ingredients are not commingled and maintain records sufficient to trace feed materials backward and forward through the supply chain. The Wisconsin feed industry has chosen not to handle prohibited proteins at facilities that manufacture ruminant animal feeds.
- DATCP enforces the federal ban of prohibited animal proteins in cattle feed in Wisconsin through inspection, record checks, and tracebacks. Wisconsin licenses nearly 1,300 commercial feed companies including 550 in-state feed manufacturers. Wisconsin inspectors have found no use of prohibited proteins in ruminant feed since the ban was instituted. Fewer than 10 Wisconsin companies use mammalian protein even in permitted feeds such as poultry and pet foods.
- Approximately 550 in-state feed manufacturing facilities have been inspected at least once since Wisconsin implemented the federal feed rule in 1998. Since then, DATCP enforcement staff inspect about 100-150 mills each year. A full-blown inspection examines manufacturing practices and takes 8-10 hours. DATCP has implemented elements of the BSE inspection into its routine inspection procedures. Trace back and trace forward inspections are completed on feed ingredients to ensure the integrity of the feed products and compliance with the regulations.
- In addition to routine inspections, DATCP staff conducted a special study to determine compliance with the feed ban, visiting 20 dairy and beef farms in 2003 to assess their understanding and implementation of the feed ban. These visits will continue in 2004.
- Since BSE was discovered in the United Kingdom, DATCP has provided information to producers and the feed industry at farm shows, trade shows, industry presentations and as a part of inspections.

DATCP also created a brochure targeted at livestock producers and the feed industry, which has been distributed nationwide.

- USDA and DATCP inspect domestically processed meat, and FDA oversees the manufacture of medical and other products to help ensure they do not contain potentially infective brain and spinal cord (central nervous system) tissue.
- DATCP entered into a Memorandum of Understanding with USDA-APHIS. When Wisconsin food safety inspectors observe clinical signs of a central nervous system disorder consistent with the symptoms of BSE, USDA-APHIS is contacted. USDA-APHIS collects a sample of brain tissue from the suspect animal for BSE testing.
- To detect BSE in the estimated 97 million dairy and beef cattle in the United States, USDA implemented a surveillance program to conduct post mortem tests for BSE on the brains of certain adult cattle.

Cattle Brain Samples Collected and Tested for BSE Through Surveillance Program, 1994-2003

# Tested	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Brain Samples	692	744	1,143	2,713	1,080	1,302	2,681	5,272	19,990	20,543

Source: APHIS, USDA

- In 1998 USDA implemented a cooperative program with the rendering industry to ensure that carcasses of animals condemned at slaughter for signs of neurological disease are held until test results are completed. Under this program, USDA may share the expenses to store or dispose of carcasses during the testing period.

Import Restrictions

In addition, FDA and USDA have restricted imports from other countries as follows:

- 1989** USDA restricted imports of cattle and other ruminants from countries with BSE
- 1991** USDA restricted imports of inedible ruminant by-products (e.g., meat and bone meal) from countries with BSE
USDA restricted imports of edible ruminant by-products (e.g., meat and bone meal) from countries with BSE
- 1992** FDA restricted imports of ruminant by-products for use in foods, human drugs, dietary supplements, or cosmetics from countries with BSE
- 1995** FDA restricted imports of bulk shipments of bovine by-products for use in dietary supplements, or cosmetics from countries with BSE
- 1997** USDA restricted imports from countries at risk for BSE but with no confirmed cases
- 2000** USDA restricted imports of inedible animal by-products processed or stored in a country with or at risk for BSE
FDA restricted imports of inedible animal by-products for use in animal feed from countries with or at risk from BSE
- 2001** USDA restricted imports of edible ruminant products processed or stored in a country with or at risk from BSE
FDA restricted imports of animal feed (including pet food) and other products containing inedible animal by-products from countries with or at risk from BSE
FDA restricted imports of foods containing ruminant by-products from countries with or at risk from BSE

Additional Actions Taken Since December 23 To Protect The Integrity And Safety Of U.S. Beef

On December 30, 2003, Agriculture Secretary Ann Veneman announced additional safeguards to bolster the U.S. protection systems against BSE, and further protect public health. The policies will further strengthen protections against BSE by:

- removing certain animals (i.e., downer animals) and specified risk material and tissues (i.e., skull, brain, trigeminal ganglia, eyes, vertebral column, spinal cord and dorsal root ganglia of cattle over 30 months of age and the small intestine of cattle of all ages) from the human food chain
- requiring additional process controls for establishments using advanced meat recovery (AMR)
- holding meat from cattle that have been targeted for BSE surveillance testing until the test has confirmed negative
- prohibiting the air-injection stunning of cattle.

Additional Actions Needed

One of two pilot states developing a premises registration system, Wisconsin is in the forefront of developing a verifiable system of animal identification. Governor Jim Doyle called for passage of legislation mandating registration of all livestock premises, making Wisconsin the model for other states across the nation.

Secretary Veneman announced that USDA will begin immediate implementation of a verifiable system of national animal identification. USDA's national plan assumes states have compatible premise registration systems in place. The development of such a system has been underway for more than a year and a half to achieve uniformity, consistency and efficiency across this national system. Wisconsin has been a key partner in developing the national plan.

Current Information Is Available at:

USDA	http://www.aphis.usda.gov/lpa/issues/bse/bse.html
DATCP	http://www.datcp.state.wi.us/index.jsp

**Wisconsin Department of Agriculture,
Trade & Consumer Protection**
2811 Agriculture Drive
P.O. Box 8911
Madison, Wisconsin 53708
608-224-5130
animals@datcp.state.wi.us

January 8, 2004